IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A ~~production~~ method for producing a biogas~~, the method~~ comprising:

a first step of determining a maximum tolerable concentration of glucide in a liquid biomass, according to a correlation between a concentration of a ~~predetemined substrate~~ glucide in a biomass ~~liquid to be processed containing an organic matter~~ and a rate of consumption of the substrate by a hydrogen-fermenting microorganism(s), a maximum tolerable concentration of the ~~substrate~~ glucide consumable by the hydrogen-fermenting microorganism, a second step of

generating a biogas comprised of hydrogen by causing the hydrogen-fermenting microorganism to hydrogen-ferment the ~~liquid~~ biomass that contains non-hydrogen fermenting microorganism(s) to be processed while keeping the ~~substrate~~ glucide in the ~~liquid~~ biomass to be processed at a concentration not higher than a maximum tolerable concentration.

Claim 2 (Cancelled)

Claim 3 (Currently Amended): The method for producing a biogas according to claim 1, further comprising a third step of generating a fermentation gas comprised of methane by causing a methane-fermenting microorganism to methane-ferment the fermented ~~liquid~~ biomass after the hydrogen fermentation in the second step.

Claim 4 (Withdrawn, Currently Amended): The method for producing a biogas of claim 1, the method comprising the step of generating a biogas comprised of hydrogen by

performing hydrogen fermentation while adding a hop or hop component to a ~~liquid~~ biomass to be processed ~~containing an organic matter~~ so as to inactivate a contaminant microorganism inhibiting hydrogen generation without affecting a growth or activity of a hydrogen-fermenting microorganism.

Claim 5 (New): A method for enhancing hydrogen-fermentation of a liquid biomass containing a glucide substrate by at least one hydrogen-fermenting microorganism(s) and a contaminant microorganism that inhibits hydrogen fermentation of the glucide substrate by the hydrogen-fermenting microorganism(s), comprising:

adjusting the concentration of glucide substrate in said liquid biomass to remain at or below the maximum

correlating the concentration of a glucide substrate in a liquid biomass and the rate of consumption of the glucide substrate by a hydrogen-fermenting microorganism, and

generating a biogas comprised of hydrogen by causing the hydrogen-fermenting microorganism to hydrogen-ferment the liquid to be processed while keeping the glucide substrate in the liquid to be processed at a concentration not higher than the maximum tolerable concentration.

Claim 6 (New): A method for producing a biogas containing hydrogen comprising:

fermenting a liquid biomass containing a glucide substrate with at least one microorganism(s) that produces hydrogen gas by fermentation of the substrate, wherein said liquid biomass also contains at least one non-hydrogen-fermenting microorganism; while maintaining the concentration of the glucide substrate in the liquid biomass no higher than the maximum tolerable concentration for said hydrogen-fermenting microorganism,

wherein the maximum tolerable concentration is that concentration of glucide-containing substrate which is predominantly consumed by the hydrogen-containing microorganism.

Claim 7 (New): The method of claim 6, wherein a hop or hop component is added to the liquid biomass containing the glucide substrate.

Claim 8 (New): The method of claim 6, wherein said biomass is not heated or warmed to inactivate bacteria that inhibit hydrogen fermentation.

Claim 9 (New): The method of claim 6, wherein said hydrogen fermenting microorganism(s) comprise a mixture of anaerobic hydrogen-fermenting microorganisms.

Claim 10 (New): The method of claim 6, wherein said non-hydrogen fermenting microorganism is at least one strain of lactic acid bacteria.

Claim 11 (New): The method of claim 6, wherein said hydrogen-fermenting microorganism produces an organic acid from the substrate and a biogas that is a mixture of hydrogen and carbon dioxide.

Claim 12 (New): The method of claim 11, wherein the organic acid produced by fermentation with the hydrogen-fermenting microorganism is subsequently subjected to fermentation with at least one microorganism that generates methane.